

SEAS Society of Simulations



Mission Statement

- ⑥ To provide interaction workspace for different simulation tools
- ⑥ To accommodate multi-paradigm simulations
- ⑥ To enable distributed scalable simulations
- ⑥ To build reliable simulation systems with unreliable components



Concepts

- ⑥ **Shared reality space**
 - Each simulation has its own reality
 - Subset of reality meant to be shared is published in the space
- ⑥ **"Agentification" of simulations**
 - Simulations act like autonomous agents cooperating in a society
- ⑥ **Simulations do not communicate directly, but instead coordinate activities by exchanging reality through a space**
 - Inspired by David Gelernter's Linda Space
 - Shared, associative, transactionally secure



Benefits

- ⑥ **Capability to plug-and-play simulations seamlessly**
 - Reduce complexity of introducing new simulations
 - Flexibility to adjust fidelity of simulations based on scenario
- ⑥ **Persistence of reality spaces allows failure recovery**
 - Simulation can be recovered to its previous state based on the persisted reality
- ⑥ **Reality space as a basis for distributed simulation communication**

